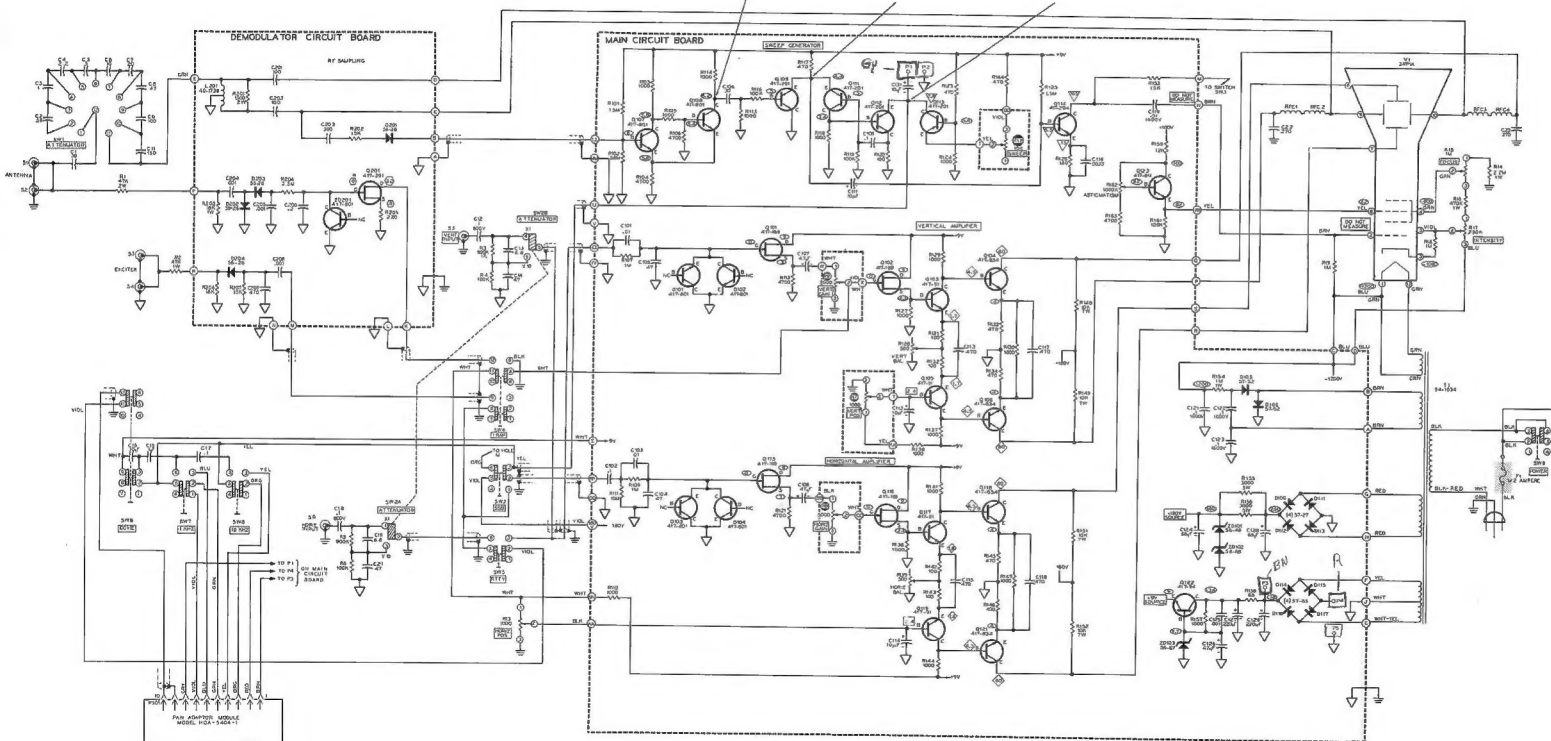


The figure contains three separate graphs, each with a vertical axis and a horizontal axis representing position. The first graph on the left shows potential energy (PE) as a periodic square wave, with values alternating between 0 and 8V. The middle graph shows kinetic energy (KE) as a periodic square wave, with values alternating between 0 and 3.8. The third graph on the right shows total energy (TE) as a periodic sawtooth wave, with values alternating between 4 and 8. The total energy is constant at 8 in the regions where the potential energy is 0 and drops to 4 in the regions where the potential energy is 8.



# SCHEMATIC OF THE HEATHKIT® STATION MONITOR MODEL HO-5404

## NOTES:

1. Component numbers are arranged in the following groups:

1 - 99	Parts mounted on the chassis.
101 - 199	Parts mounted on the main circuit board.
201 - 299	Parts mounted on the demodulator circuit board.

2. All resistors are rated at 1/4-watt and have a tolerance of 5% unless otherwise noted. Resistor values are in ohms (k = 1000; M = 1,000,000).
3. Capacitor values less than 1 are in  $\mu\text{F}$  (microfarads). All other capacitor values are in pF (picofarads) unless otherwise noted.
4. The following symbols indicate DC voltages measured under varying conditions; generally, the RTTY pushbutton is depressed, no signal input, spot is centered on the screen:



This symbol indicates a normal DC voltage.



This symbol indicates voltages that vary with the setting of the balance controls.



This symbol indicates voltages that vary with the settings of the position controls.



This symbol indicates voltages measured with the Trap pushbutton depressed, no RF signal input.




This symbol indicates voltages that vary with settings of the Sweep and range (100, 10 k, 100 k) pushbutton, SSB pushbutton depressed.

5.  This symbol indicates a circuit board ground.

6.  This symbol indicates chassis ground.

7.  This symbol indicates a circuit board connection.

8.  This symbol indicates a component that is shown within the circuit board outline that is actually located on the chassis.

9. \* (Q201) This voltage may vary from 0 to -9 VDC, depending upon the RF level present at the Antenna input sockets.
10. Switches SW3, SW6, and SW9 are shown in their depressed (in) positions. Switches SW4, SW5, SW7, and SW8 are shown in their released (out) positions.
11. Pins P1 through P5 are for connection of the optional Pan Adaptor Module, Model HOA-5404-1.
12. The part within the shaded area is critical to product safety. Replace it only with the proper Heath part or the exact equivalent.
13. Waveforms were taken with the SSB and 1 kHz pushbutton depressed, and the SWEEP control fully clockwise. The oscilloscope was set for .2 ms/DIV (pulse spacing varies with the setting of the SWEEP control).

